REMARKS

Favorable consideration and allowance are requested for claims 1, 2, 7-10, and 12-14 in view of the following remarks.

Status of the Application

Claims 1, 2, 7-10, and 12-14 are pending in this application. Claims 4-6 were previously cancelled. Claims 1 and 10 were rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent 6,914,900 B1 to Komatsu *et al.* (the "Komatsu patent") in view of "Performance Driven Adaptive Admission Control for Multimedia Applications," 1999 IEEE International Conference on Communications, 10 June 1999, pages 199-203, to Bao *et al.* (the "Bao publication"). Claim 2 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Cisco VOIP Call Admission Control, August 2001, pages 1-26 to Odom (the "Odom publication") in view of U.S. Patent Publication No. 2006/0034188 to Oran *et al.* (the "Oran publication"). Claims 3 and 11 were rejected under 35 U.S.C. § 103(a) as being unpatentable over the Odom publication in view of the Komatsu patent, and U.S. Patent 7,366,097 to Zuberi *et al.* (the "Zuberi patent"). Claims 7 and 9 were rejected under 35 U.S.C. § 103(a) as being unpatentable over the Komatsu patent and the Bao publication, and further in view of the Odom publication. Claim 8 was rejected under 35 U.S.C. § 103(a) as being unpatentable over the Komatsu patent, the Bao publication, the Odom publication, and the Oran publication. Claims 3 and 11

have been cancelled by way of the present amendment. Claims 1 and 2 have

been amended. Claims 12-14 have been added.

Rejections under 35 U.S.C. § 103(a)

According to the outstanding Office Action, the subject matter of claims 1

and 10 is rendered obvious by the combination of the Komatsu patent in view of

the Bao publication. In particular, the Office Action states, at page 3, that

"*Komatsu* fails to disclose a method further comprising using the packet loss rate

of multiple previous calls to determine a current packet loss rate based on the

packet loss rate of previous calls," but that the Bao publication discloses this

feature at pages 199 to 200 and in Figure 1. Specifically, the Office Action

states, at page 4, that the Bao publication discloses "an admission control system

that tracks the average of multiple bandwidth probe measurements in order to

calculate an admission control threshold" and that the average "prevents the

wide distribution of instantaneous values . . . from causing the admission control

algorithm to oscillate frequently and improperly admit calls based on noise

present in the bandwidth sampling process."

While Applicants acknowledge that the Bao publication is in the same

general field as that of the Komatsu patent, Applicants respectfully submit that

the Bao publication does not disclose or suggest "determining a current packet

loss rate based on said packet loss rate of previous calls." In particular, the Bao

publication is directed to performance-driven adaptive admission control for

multimedia applications where Quality of Service ("QoS") is critical to the

transmission of such applications, as they consume more network bandwidth and last longer than other transmissions.

In the measurement-based approach discussed in the Bao publication, the admission decision is based on the comparison of measured residue resources, namely, the resources that are not utilized by the existing flows within the network, and the requested resources of the new flow. If the measured residue bandwidth is greater than the new flow, the new flow would be permitted within the network. This is discussed in the first paragraph in Section II of the Bao publication.

In the study presented in the Bao publication directed to measuring the residue bandwidth (second paragraph of Section II), each measured sample is obtained at the end of an averaging period of S units by counting the fraction of unused units among the S transmission units (all packets are assumed to be of the same length, and a unit is a packet transmission time). A measurement block of size T (where T=nS) contains n measured samples, and at the end of the measurement block the residue bandwidth fraction is chosen based on all the measured samples in the current block. The residue bandwidth fraction can be selected to be the average value or the minimum value as is shown in Figure 1.

While the Bao publication discloses measuring a sample to determine the residue bandwidth fraction, it states that "[a]t the end of a measurement block, [t]he residue bandwidth fraction . . . is chosen based on all the measured samples in the current block." Bao publication at p. 200 (emphasis removed). Applicants

respectfully submit that this disclosure in the Bao publication is not the same as "determining a current packet loss rate based on said packet loss rate of previous calls," as recited in claim 1.

Applicants further note that the Office Action states, at pages 3-4, that "[t]he system of *Bao* discloses an admission control system that tracks the average of multiple bandwidth probe measurements in order to calculate an admission control threshold" and that "the average . . . prevents the wide distribution of instantaneous values . . . from causing the admission control algorithm to oscillate frequently and improperly admit calls based on noise present in the bandwidth sampling process." In response, Applicants respectfully submit that the disclosure in Figure 1 of the Bao publication does not support such an interpretation. In the description of Figure 1, the Bao publication states that "[i]f we use the AVG curve in admission control, there will be more flows admitted to yield higher network utilization because the node will be perceived as having more available bandwidth resources." *Id.* Applicants believe that this is not the same as "the average . . . prevents the wide distribution of instantaneous values . . . from causing the admission control algorithm to oscillate frequently and improperly admit calls based on noise present in the bandwidth sampling process." And while the Bao publication discloses an adaptive bandwidth measurement that adjusts by toggling between the minimum value and the average value for the estimated residue bandwidth

fraction using a performance test as shown in Figure 2 so that QoS is maintained, this is not what is recited in claim 1.

Applicants additionally note that the Office Action states, at page 4, that "the multiple samples of *Bao* could be used in the system of *Komatsu* by averaging the packet loss rate for multiple previous calls in order to provide a more stable measurement for admission control" and that "the motive to combine is to reduce system sensitivity to noise in the drop rate measurement process by averaging multiple drop-rate samples from previous calls." As discussed above, Applicants submit that the Bao publication does not disclose or suggest using measurements from previous calls but uses the measurements from the current block to determine the average and minimum values.

For at least these reasons, Applicants respectfully submit that claim 1 is patentable over the Komatsu patent and Bao publication. And as claim 10 depends from claim 1, it is also patentable over these references. Further, as claims 7-9 depend directly or indirectly from claim 1, these claims are also patentable, as are new claims 13 and 14.

According to the Office Action, the subject matter of claim 2 is rendered obvious by the combination of the Odom and Oran references. In response, Applicants respectfully submit that this rejection is moot in light of the amendment to this claim. In particular, neither of the cited references discloses or suggests "determining a packet loss rate of previous calls from a first local area network to a second local area network," and, therefore, this claim is

allowable over the cited references. In addition, claim 12, which depends from

claim 2, is also patentable.

* * * * *

If there are any questions regarding this response or the application in

general, a telephone call to the undersigned would be appreciated since this

should expedite the prosecution of the application for all concerned.

If necessary to effect a timely response, this paper should be considered as

a petition for an Extension of Time sufficient to effect a timely response, and

please charge any deficiency in fees or credit any overpayments to Deposit

Account No. 05-1323 (Docket # 038665.56183US).

Respectfully submitted,

Date: May 6, 2010

/Michael H. Jacobs/
Michael H. Jacobs
Registration No. 41,870

CROWELL & MORING, LLP
Intellectual Property Group
P.O. Box 14300
Washington, DC 20044-4300
Telephone No.: (202) 624-2500
Facsimile No.: (202) 628-8844
MHJ:msy